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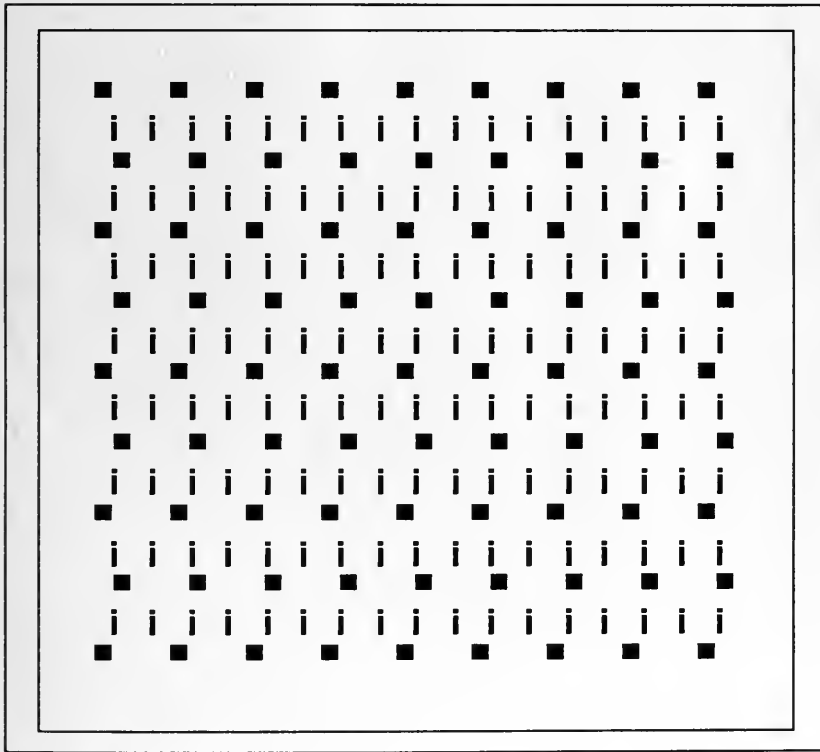
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# East Asian Business and Development Research Archive: A Unique Data Resource

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by Jean Stratford<sup>1</sup>

## INTRODUCTION

Established in 1986, the East Asian Business and Development (EABAD) Research Archive is the only facility in the United States that conducts extensive research on the firms and inter-firm networks of East and Southeast Asia and systematically collects materials supporting that research. In addition to its print collections, the Archive is one of only two facilities in the world that acquires and develops computerized databases in this timely area. Given that Asian nations invested over 56.4 billion dollars in the United States in 1988, the collections of this unique and important data archive provide the detailed quantitative information critical to better training students to work in the international business community and to informed research and decision making by scholars, and public and private sector leaders in the United States and abroad.

The East Asian Business and Development Research Archive was established to house data collected and generated by a National Science Foundation-funded research project on East Asian business groups that is headquartered at the University of California, Davis. Although the Archive was founded to house data collected and generated by its affiliated researchers, as the research progressed it became apparent that many of the resources needed to complete the research were not readily available in the United States. In response to this need, the Archive expanded its focus to include printed materials which support research on the firms, inter-firm networks, industrial sectors, and economies of East and Southeast Asia, as well as commercial and government datafiles.

The Research Archive is open to the public, and has hosted scholars from across the United States and around the world. Select information on holdings, primarily for serials, of the Research Archive is reported to the University of California's MELVYL(TM) online catalog and to CALLS (the California Academic Library List of Serials). The Research Archive shares appropriate portions of its collection via the campus's Interlibrary Loan Department, and some materials (such as machine readable files) may be accessed by arrangement with Archive staff.

## RESEARCH

The Research Archive currently serves the information needs of some twenty-five faculty and advanced graduate students in six academic departments (Agricultural Economics, Applied Behavioral Sciences, Economics, History, Political Science, Sociology) and the Graduate School of Management. However, the Archive also continues to serve the research needs of the multinational, multidisciplinary project it was founded to support. This project is studying Asian business structure and practices and includes collaborating research teams at three formally cooperating institutions: the University of Hong Kong, National University of Singapore, and Tunghai University in Taiwan. Archive researchers also cooperate on an informal basis with scholars in Japan and South Korea.

These research teams are focusing on the development and structure of business in contemporary Asia. A primary focus of Archive researchers is the organization of Asian business networks. Business networks are diversified groups of firms common in Asian nations. Although these business networks are found throughout Asia and are an important factor in the recent growth and prominence of Asian economies, they are little studied. While inter-firm networks are found throughout Asia, there are considerable differences among the networks formed in various nations. Among the structural and organizational differences from country to country are the number and size of affiliated firms in the networks, and the characteristics of the networks and their member firms.

A popular perception of Asia's newly emerging industrial powers holds that these nations form a homogeneous economic block and have boomed simultaneously because of their common culture, political factors, and management practices. However, research by Archive scholars suggests that the economic success of each country may be due, on the contrary, to the fact that each country has identified and taken advantage of its own societal differences (or comparative advantage) in the development of its business network structures and organization. On closer examination, the cultural and social traditions of these countries are very different, and these traditions lend themselves to different organizational patterns and strategies. A brief examination of the

network structure in Japan, South Korea, and Taiwan helps to illustrate this point.

### *Japan*

In Japan, the eldest son inherits everything. Families will often adopt to insure a male heir. Family relations are generally harmonious and cooperation is an ideal. This cultural background is reflected in the structure of Japanese business networks. There are six major inter-market enterprise groups and ten large independent industrial groups. The business networks of Japan are made up of a large number of firms. There are an average of over 112 firms in each inter-market group and an average of 33 firms in the independent groups. These large Japanese networks also tend to be comprised of large firms. In fact, the firms of the Japanese business groups are larger on the average than those of South Korea or Taiwan, with an average of more than 2,800 workers per firm.

This small cluster of sixteen business groups dominates the Japanese economy. Among the business groups are such well known names as Mitsubishi, Mitsuui, Sumitomo, Hitachi, Toyota and Nissan. These groups are not conglomerates in the same sense that has evolved in the West. The ties which bind firms into the group are more social than legal, as firms draw their sense of identity from their membership in a particular community of corporations with its own distinct identity. Unlike U.S. corporations, individual independent firms understand their rank and role in group and are committed to the good of the whole.

The inter-market groups (or *kigyō shudan*) consist of a horizontally-bound web of large firms which tend to occupy leading positions in different economic sectors. These non-competing firms form a community of equals in which all firms exercise mutual control. These groups all include their own banking institutions, insurance companies, and trading companies that serve the financial needs of the group. In addition, all have a "Presidents' Club" that includes the president of each leading firm in the group in a council which meets regularly to discuss the affairs and concerns of the group as a whole. Each Presidents' Club member firm maintains a number of vertically aligned affiliate and subsidiary firms (or *keiretsu*). These affiliate and subsidiary firms also maintain a number of exclusive long-term subcontracting relationships with smaller firms that are not formally part of the group, but are vital to the production system.

The independent inter-market groups are also *keiretsu* (or vertically integrated networks). Each consists of a very large parent company with vertically aligned subordinate companies. Despite their label, these "independent" groups are not totally independent from each other or the

inter-market groups. The independent groups maintain linkages to other groups through such mechanisms as mutual shareholding by financial institutions. These linkages closely resemble the sort of ties found among the Presidents' Club firms.

### *South Korea*

In South Korea, most of a family's wealth passes to the eldest son; although younger brothers often receive some inheritance. Families tend to be tightly knit. Again, this family structure affects the organization of the Korean business networks. These networks are known as the *chaebol*. In contrast to Japan's large groups, the *chaebol* networks are smaller, including only about 11 firms each. The size of the firms in the *chaebol* is also substantially smaller than those in the Japanese business groups, with an average of less than 1,500 workers. However, the *chaebol* are still major players in the economy of South Korea and include such major firms as Hyundai, Samsung, Daewoo, and Lucky Goldstar. *Chaebol* tend to be owned or controlled by a single person or family, with stockholding playing a very minor role in the unification of the business group. Very few of the *chaebol* firms issue stock, and stock ownership, as well as corporate directorship, often is tightly held by family members. The *chaebol* generally are organized through a central holding company and are managed according to a unified structure much more like an American family business than the Japanese inter-firm networks. Where the *kigyō shudan* are a community of equals, the *chaebol* are under hierarchical control by top management and family members. The *chaebol* also tend to be much less diversified than the Japanese *kigyō shudan*, specializing in only a few related industrial sectors. Unlike the Japanese business networks which incorporate banks and other financial firms to meet the group's needs, the *chaebol* do not own banks, but do hold minority shares in government controlled banks. The *chaebol* do not employ the subcontracting relationships common to the Japanese business groups. Instead, they tend to start or acquire firms to meet their own production needs.

### *Taiwan*

In Taiwan, yet another pattern of familial organization prevails. Wealth is divided equally among all sons, and family squabbling and rivalry is not uncommon. This is reflected in a network structure which emphasized smaller, separate firms in a network which is much less structured than is the case in Japan or South Korea. The business networks of Taiwan are known as *jituanqiyè*. These business groups incorporate the smallest number of firms of the three nations, typically fewer than 8 firms each. These small business groups also tend to be comprised of the smallest firms of the three nations, with an average of less than 500 workers per firm, and as a group, *jituanqiyè* tend to play a much smaller role in the

economy than the business groups of Japan and South Korea. Only 40% of the top 500 manufacturing firms in Taiwan belong to the jiuanqiyi. In fact, business groups dominate in only one industrial sector in Taiwan, textiles. Very few of the Taiwan business groups are familiar in the West (among the few exceptions are Tatung and the computer firm Acer). The Chinese business groups also have none of the tight vertical ties that characterize the keiretsu and the chaebol. Instead, the Taiwan business groups are highly diversified agglomerations of smaller firms in different economic sectors, having an average of 8 firms spread across 4 different industrial sectors. Like Japan, the Chinese business groups rely on subcontracting relationships with non-member firms. However, these relationships differ from the Japanese in that Taiwan's satellite production systems, as they are known locally, are highly flexible arrangements which may be short term in duration. The prevailing ownership pattern in Taiwan is one of private family control, either family firms or limited partnerships. However, unlike the South Korean chaebol which are tightly controlled by a single patriarch, the Taiwan business groups are governed by the interests of the extended family. The Taiwan business groups are only loosely integrated and lack a unified management structure. Instead, every firm duplicates its own management structure with the same set of people, generally the owners and close family members, holding multiple managerial appointments in several firms within the group. Financing in the Taiwanese business groups also differs from both Japan and South Korea and reflects this principle. By far the largest source of money, more than 60% of loans, is privately arranged loans from family and friends, as well as retained earnings.

#### COLLECTIONS

A wide array of quantitative and descriptive information is needed to map and analyze the structure and impact of business groups in Asia. A broad range of statistical data are required, ranging from individual corporate balance sheets and shareholder information, to detailed data by industrial sector, and basic macroeconomic time series for each economy under study. Descriptive information and analyses are also useful. These materials range from corporate directories, annual reports, and newspaper coverage to the recent work of other scholars as presented in scholarly working paper series from institutions both in the United States and abroad. The East Asian Business and Development Research Archive collects such materials, in both print and electronic formats. Focal countries for the Research Archive include Hong Kong, Indonesia, Japan, Malaysia, the People's Republic of China, Philippines, Singapore, South Korea, Taiwan, and Thailand.

#### *A. Print*

The Archive collects a broad range of print materials

from and pertaining to focal nations. Both textual and quantitative information are available. For firms, the Archive collects selective annual reports and other corporate publications, corporate directories (with an emphasis on those providing balance sheets and other financial data), private investment advisory services, and publications from Asia's stock exchanges. The Archive also maintains a selective Asian newspaper clipping collection which includes articles on corporations and businessmen. Archive assistants presently clip selectively the South China Morning Post, Korea Herald, Straits Times, and Sing Tao newspapers. For data on the industries and economies of Asian, holdings include government statistical reports such as statistical abstracts and economic censuses, Asian business magazines, and academic working paper series from U.S. and foreign institutions. In addition, the Archive collects indexes and bibliographies from Asia.

At present, vernacular language materials are collected in Chinese, Japanese, Korean, and Thai. Research Archive staff translate these materials as needed to support research, making them available to many Western researchers for the first time. Among the items currently being acquired are some unique materials. The first is the "Files and papers of companies re-registered during the Japanese occupation." The records to be acquired are the unpublished files and papers of companies re-registered during the Japanese occupation of Hong Kong (approximately 1942). These materials include memoranda and articles of association, lists of shareholders, annual returns including profit and loss accounts and balance sheets of the registering company, and the articles of incorporation. These records provide a "snapshot" of the formation of businesses in modern Hong Kong that adds a new dimension to our understanding of the firms and business groups of this present day economic power. The second collection to be acquired is a set of interview transcripts from the research team at Tunghai University which has conducted detailed interviews with corporate officers of large Taiwan firms. These one-of-a-kind transcriptions provide fascinating insights into Taiwan business practices and the structure of Taiwan firms.

#### *B. Machine Readable*

At present, the Research Archive's machine readable holdings consist largely of our own in-house databases on East Asian business networks, particularly those in Taiwan and South Korea. These datafiles provide basic financial and background information on the business groups and their member firms. For Taiwan, a database on stockholders and directors is also in preparation. Archive Research assistants also are preparing comparable databases for Hong Kong and Singapore.

For both Taiwan and South Korea, datafiles have been developed for the major business networks, as well as for their member firms. Data are available for 1983 and 1986. The files contain such information as firm or group name, sales, assets, debts, equity, profit, value added, number of workers, and industrial sector codes. Data for the Korean files are translated from the Korean language publications of the Management Efficiency Institute. Data for the Taiwan files comes primarily from the records of the China Credit Information Service.

#### **FUTURE DIRECTIONS/ACCESS ISSUES**

In the future, the Research Archive hopes to expand its database holdings through acquisitions from several sources. One source of datafiles is the work of the international research network described above. This network will continue in the long term, and the individual teams will continue to create unique data collections for the Archive on a cooperative basis, with each team sharing the data they have collected with the other teams.

The Archive is also expanding into the area of government and commercially produced datafiles. Archive representatives are negotiating with the key government statistical agencies in Hong Kong, Taiwan and Thailand to obtain their censuses or surveys of manufacturing establishments in computerized form. In some cases, the Research Archive will be the only public institution outside those countries to have the material in computerized form. We expect the Thailand files shortly and the Hong Kong datafiles as early as next Fall. We are also in negotiation with South Korea for similar datafiles and plan to expand our coverage to as many other Asian countries as possible. In addition to economic census data, we are working to identify and acquire other economic and business databases from public and private sources in the Far East. Currently, sources we are negotiating with include the China Credit Information Service, Daishin Economic Research Institute, and the Stock Exchange of Hong Kong.

We have just received word that the Research Archive was awarded a grant from the University of California Office of the President's Pacific Rim Research Program for 1990/91. A primary purpose of the grant will be to develop a public online system which will provide remote access to some of the Archive's materials. We hope to make the system available to all qualified researchers for not-for-profit use. The system will be available to the UC campuses as a gateway resource to the MELVYL(TM) online catalog.

At present, we envision at least three basic components to the system. First, the service will provide electronic mail capabilities for communication between and among UC scholars of East and Southeast Asian societies. The UC system computer network already provides the

capability for private electronic communication between scholars. This system will be a more public forum for communication. Scholars will be able to upload messages or inquiries for general response by their colleagues, post notices of upcoming events, or send inquiries to the Archive. A second component of the online system will be appropriate statistical databases of the Research Archive. Selected files of the Research Archive will be mounted online to allow searching and downloading by scholars at other campuses. Finally, we will mount a bibliographic database. We have negotiated an exchange agreement with officials of the United Nations for access to the electronic version of their Asian Bibliography. Asian Bibliography is a quarterly publication of the Economic and Social Commission on Asia and the Pacific that provides citations to a wide range of literature in the social sciences. The bibliography emphasizes literature from Asian sources in both English and vernacular languages.

A project such as the one we have undertaken raises a number of critical issues with regard to collection development and access. First, the logistics of collection development are extremely complex. Geography, language, culture and costs all serve as barriers to collection building.

Acquisitions must often be handled in person. Research Archive participants have made multiple visits to Asia in order to build the necessary ongoing relationships with data producers. In many cases, the computerized files we seek to acquire are not publicly available (or have not been made available to foreigners), and careful negotiation is necessary to obtain permission to acquire them. In addition, while ranking officials in the government usually speak English, in most Asian countries, the staff who fulfil data orders generally do not. So, even with a visit to establish an agreement for the provision of data, fulfillment of the request is sometimes difficult, and often slow. Letters don't always reach the hands of English speakers, and FAX machines and e-mail are not common throughout Asia, at least in the government sector. Follow-up visits are required to complete the transaction, to acquire updates to files, or simply to maintain the relationship cultivated with a given agency. Costs can also be very prohibitive unless an agreement can be reached to supply data at a non-commercial rate, or on a cost recovery basis. All of which further emphasizes the need to handle acquisitions in person.

In addition, although the Research Archive has just begun to collect datafiles from Asian sources, we anticipate a certain number of barriers for data users; however, we do not have the experience necessary to determine the extent of these barriers. We are already finding that the language barrier can be somewhat problematic. For example, we hope to acquire balance

sheet data for publicly traded companies in South Korea from a private research firm. However, all the documentation and textual data in the files are in Korean. At least some in-house translation will be required to make this data generally useful. In addition, we anticipate that for most of our foreign acquisitions remote usage will be limited. We will either need to create, document, and mount general purpose subsets in our online system, or make arrangements for scholars to visit the Research Archive and perform their own extractions. In order to use these foreign datafiles wisely, we anticipate that many researchers will need to carefully consult both the tapes and the documentation prior using the data in a research project. For this level of use, on-site consultation will be required. In addition, in some cases our license allows us to make the data available to all qualified researchers for not-for-profit use, but will not allow us to make copies of datafiles for the use of other institutions, again reinforcing the need for on-site consultation and usage.

On the other hand, our planned online system presents some options for extending access to highly specialized, yet topical, research data. In many respects, the online system is an experiment to assess the feasibility remote access to such resources via computer networks. Over the next several years, we hope to better understand the strengths and limits of such networks for resource sharing of data collections such as ours. We also hope to better define the broader collection development and access issues and to begin to answer some of the key questions which will determine the extent to which this facility can grow and service scholars at other UC campuses, across the country, and around the world.

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<sup>1</sup> Presented at the IASSIST 90 Conference held in Poughkeepsie, N.Y. May 30 - June 2, 1990.  
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# THE EUROPEAN VOTERS STUDY 1989

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by Cees van der Eijk<sup>1</sup>  
Manfred Kuechler  
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## THEORETICAL PERSPECTIVES

The European Voters Study (EVS) 1989 is a study of behavior, motivations, attitudes and perceptions of the electorates of the member states of the European Community in the European Parliament Election of 1989 — the third of its kind after 1979 and 1984. The objectives for designing and conducting a European Voters Study are twofold. First, a European Voters Study can be mainly looked at from the perspective of studying European elections and their place in the process of European integration. Second, more generally, it can be viewed from the perspective of comparative electoral research.

The perspective of European integration. Protagonists of European integration have always showed great interest in the direct elections of the European Parliament which took place for the first time in 1979. Those who had lamented the slow pace of development of the European Community, hoped that a directly elected Parliament would provide a powerful stimulus to further integration. Unlike the other institutions of the Community, the Parliament would have its own popular mandate and would exemplify by its very existence the desire of the citizens of the member states to live in a unified Europe. Some of these expectations reflected a certain degree of naivety with respect to the immediate political effects of these elections. Yet, the actual turnout disappointed not only the protagonists, but also startled more neutral observers. It was widely assumed that abstentions reflected a considerable degree of indifference or even opposition to the idea of European integration. No 'popular mandate' for further European integration could be inferred. In most countries the campaign was dominated by other, mostly national political issues and concerns. The few exceptions to this general rule offered little comfort from a pro-integration perspective: predominantly in Denmark and to a lesser degree in Great Britain, party choice appeared to reflect a sizeable amount of anti-EC sentiment. The experience of 1979, reinforced in 1984, raised a number of questions concerning both turnout and party choice of European voters. Reliable answers were needed in order to properly evaluate the implications for the future course of European integration.

Does low turnout reflect just a widespread lack of familiarity with the European Parliament, is it just a visibility problem? Or does it reflect a more fundamental feeling that the European Parliament, and possibly the European Community at large, is irrelevant or detrimental to the individual citizen's interests and concerns? Are those abstaining from the European elections decidedly critical about, or even downright hostile towards European integration in general and towards the European Parliament in particular? What part do the political parties play? Are they unable or unwilling to put Europe on the national agenda, to channel and represent the EC related interests of their clienteles? To which extent, then, is the voters' choice between the parties an acknowledgment of specific party goals with respect to European integration? Does party choice reflect different EC policy preferences or is it predominantly determined by domestic considerations? Obviously, contingent upon the answers to these questions, very different conclusions concerning the future course of European integration can be drawn. For most, if not all of these questions, survey data representative of the electorate at large are necessary to obtain answers solidly grounded in empirical evidence.

The perspective of comparative electoral research. The study of elections and individual voting behavior is a very well developed area of empirical political science. In virtually all western democracies large scale surveys are conducted during election times to uncover the forces which shape voting behavior and thereby election results. However, there is considerable national variation in the depth (over time), quality, and accessibility of these data. The United States, Great Britain, and West Germany have long standing traditions of scholarly election surveys which are generally available for secondary analysis. The situation in a number of other countries is less fortunate. Still, a number of valuable attempts have been made to utilize national election studies from various countries for cross-national comparisons (see e.g. Budge, Crewe, and Fairlie 1976; Crewe and Denver 1985; Dalton, Flanagan, and Beck 1984). On the one hand, the volumes which document these efforts exhibit the strong common strands in the design and conceptualization of the various election studies. Yet, on the other hand, they clearly reveal the discrepancies between them.

National election studies are indeed strongly national in character. To some degree this is unavoidable. The diversity reflects real differences with respect to systemic arrangements (e.g. electoral rules) and political culture. But this diversity is also due to (false) economy: questions which have little explanatory value in a strictly national study, but which are essential to establish comparability with other countries are the first ones to be cut if such questions are considered at all. Incompatibilities in overall research design, in choice of concepts, in manner of operationalization, in question wording and format, and — last but not least — in the demographics section are likely to continue for the noble cause of preserving national comparability over time. The situation, then, is somewhat paradoxical: while the field of electoral research is among the oldest, and certainly most developed areas of empirical social research, it has not generated the kind of large scale cross-national survey projects which have been so pivotal in the development of other areas of comparative mass political behavior (see e.g. Almond and Verba 1963; Barnes and Kaase 1979).

#### PREVIOUS WORK

In the past, the Eurobarometer surveys have been utilized in various ways to generate data related to the process of European integration. Questions concerning electoral participation have been included in the surveys prior to and following the European Elections of 1979 and 1984. Questions relating to affective and evaluative orientations towards European integration, the European Community, and its various institutions and policies have been included frequently in Eurobarometer surveys and constitute an important part of the 'trend' questions which are included in each wave. Still, in spite of the wealth of material which has been collected, a number of important lacunae remain. These originate partly from the fact that certain questions were never included (e.g. questions assessing factual knowledge), and partly from the fact that the regular Eurobarometer surveys take place too far before (March), and too late after (November) the point in time at which the European elections actually take place (June).

Likewise, various surveys conducted at the occasion of previous European elections do not fill this void. They have focused on media effects and on various kinds of elites including party candidates running for seats in the European Parliament (see e.g. Blumler 1983; Reif 1984, 1985; Reif and Schmitt 1980), but they did not center on the voting behavior of the electorate at large.

#### INTERNAL ORGANIZATION AND COOPERATION

During the ECPR Joint Workshops of April 1987, first contacts were established between scholars of various

background with the purpose of designing and organizing a truly comparative European voters study to be conducted in 1989. Subsequent meetings were held in Mannheim in May and October 1987, which resulted in the formation of a group of six scholars serving as co-principal investigators: Roland Cayrol, Cees van der Eijk, Mark Franklin, Manfred Kuechler, Renato Mannheim, and Hermann Schmitt. Though not a formal member of the group, Karlheinz Reif was essential to the success of the project in providing good scholarly as well as very practical advice from the very beginning. Most members of the core group were intimately involved in earlier studies of the European election. Following precedence, cooperation was (re-)established with other research teams focusing on the campaign (coordinated by Oskar Niedermayer, at the University of Mannheim, West Germany) and on the communication process (see e.g. Blumler 1983). During the two intensive meetings in Mannheim, the group hammered out a design of the European Voters Study to be, drew up a strategy for securing funding, and decided on some division of labor.

In terms of internal organization two factors were essential. First, most valuable support was provided by the University of Mannheim which made it possible for Hermann Schmitt to serve as the coordinator for the group. Second, ample use of electronic communication via EARN/BITNET compensated for the very limited opportunities for personal meetings of the entire group. Geographical dispersion of its member and the lack of sufficient travel funds could not have overcome otherwise.

Not just with respect to travel, funding was a major problem continuously haunting the group. Funds were secured from various sources, in various amounts, at different points in time. A major portion, covering the costs of the field work for the post-election wave, was supplied by the British Economic and Social Research Council (ESRC). Other funding sources include several national newspapers which were given priority publication rights of elementary, but timely analyses of part of the data. Unfortunately, we could quite meet our funding objectives. This required several cuts and modifications in our original question program. In particular, some questions could not be replicated in all three waves as planned.

Still, the core of the original plan could be carried out. A series of questions were added to the core questionnaires of the Eurobarometer surveys #30 (November 1988), #31 (April 1989) and #31A (June 1989). Matter of fact, the close cooperation with the Eurobarometer proved to be an indispensable asset. Without it the study could not have been completed. It gave us — and the hopefully

many more researchers to come — access to the standard Eurobarometer questions and with the special edition of July 1989 (#31A) it provided a base for the post-election wave.

## DESIGN AND CONTENTS

With our theoretical focus on mass behavior, there was no alternative to a cross-national survey design. In addition, we felt that a purely cross-sectional design would be inadequate (though much more feasible) in order to study the process of cognitive, attitudinal and behavioral mobilization. The choice, then, was between a genuine panel design and a series of repeated cross-sections. Without entering the sometimes vivid debate on the advantages and disadvantages of panels in contrast to repeated cross-sections, we quickly determined that a panel design was not fundable; that only buying into an established European survey like the Eurobarometer would bring cost for data collection within a feasible range.

While not denying these very practical concerns, the repeated cross-sections design does match our theoretical and conceptual interests. Our emphasis was not on the dynamics of individual vote choice but on the preferences of groups and segments of voters, on the change of these group preferences over time, and on patterns of association.

Below, we will briefly outline the sets of variables included in the study. In terms of our prime target, turnout and party choice in the European Elections 1989, a broader set of questions needed to be included. Previous research had convincingly suggested that electoral behavior in European elections is to a large extent determined by national factors. Consequently, intended national electoral behavior was to be probed as well. Furthermore, drawing on theories on voter behavior and party competition developed in the context of the Dutch national election studies (see e.g. van der Eijk and Niemoeller 1983), a more comprehensive assessment of the electoral attractiveness of all major parties was called for — with respect to both European and national elections. Explanatory or independent variables fall into five categories.

The first category consists of variables which describe the voters' social situation; in particular, their location within the cleavage structure of each country. These are necessary for explaining behavior in terms of the traditional cleavage theories. These theories have come under attack in recent years, but the scholarly debate over the persistence of established cleavages is not over yet. Also, these variables are needed as controls in assessing the effects of attitudes, perceptions, experiences, and general political behavior on turnout and vote choice.

These variables do not attract much attention in national studies, they are mostly part of an established demographic section. However, for a cross-national study they constitute a major problem. To deal with the pervasive problems of (in)comparability which traditionally plague researchers working with these characteristics, we drew on the ongoing work of another group (Franklin, Mackie, and Valen, 1990). With a few additions, the set of demographic variables used in the Eurobarometer met our needs.

A second block of independent variables deals with substantive issue concerns. Obviously, to the extent that issues play a role in voters' decision-making, they may arise from different contexts. At the least, the following kinds of issues have to be distinguished:

- a. Community issues (extending EC membership, common agricultural policy, payments to and subsidies received from EC, etc.),
- b. supra-national issues (issues pertaining to all member states but not, or only partly related to the EC like defense, unemployment, etc.), and
- c. country-specific issues (the most salient of these were determined in close cooperation with additional country specialists).

It is desirable to tap absolute and relative saliency as well as perceptions of party competence for each one of such issues, but this would require an inordinate amount of question time. As a compromise, we constructed a list of 12 issues (4 each of the three types mentioned above). Each item was individually rated as 'very important' or 'not very important', then the respondent was asked to name the three most important ones. For these (up to) three issues, we further established which party was seen as best able to handle this problem. Funding problems restricted the full approach to the second wave, while individual salience ratings were obtained in all three waves.

The third block of variables comprises European orientations, which deal with the European Community, its institutions, the idea of European integration, etc. Many of the indicators which are regularly included in the Eurobarometer questionnaires capture the affective components of such attitudes. In addition, we also tapped the cognitive and evaluative aspects of European orientations.

A fourth block of explanatory variables deals with specific perceptions of the political parties contesting European and national elections. One set of such perceptions deals with the parties' position on Europe,

another with perceptions of the parties' location on a Left-Right scale. Additional questions establish the respondents' own location or preference.

A fifth and final block of questions deals with media exposure and information. Here, we closely cooperated with another project focused on the communication process in the electoral campaign (see above) and followed their lead. Most of these questions were replicated from the 1979 Communications Study (see Blumer 1983).

Apart from some cuts within these five sets of questions due to funding problems, other aspects originally discussed had to be shelved altogether. These include questions dealing with possible candidate effects on party choice. No attempt was made to measure the elusive concept of party identification beyond the standard item in the Eurobarometer questionnaire. However, the battery of questions in which the electoral attractiveness of all parties is to be rated (see above) offers new options to construct possibly more valid operationalizations of this concept.

## STRATEGIES FOR ANALYSIS AND PUBLICATIONS

A number of initial analyses on the data from the first wave (EB30) have been presented and discussed in an ECPR workshop during the Joint Sessions in Paris in April 1989. Special panels at the Annual Meetings of the Midwest Political Science Association (Chicago, April 1990) and the American Political Science Association (San Francisco, August 1990) have and will provide other opportunities to present and discuss findings from this study.

A special issue of the European Journal of Political Research (planned for the second half of 1990) will contain a first set of cross-national comparative analyses by members of the core group. This will be followed by an edited volume with chapters on each of the EC member countries to which additional country specialists will contribute. It will also contain a second round of comparative analyses. To conclude this presentation, we will briefly discuss the general analytic strategy behind these publication plans. At the same time, this discussion may also further productive use of this data base by other researchers in the future.

As argued in more detail elsewhere (Kuechler 1987), mass survey data provide an invaluable, but also inherently limited base for the study of mass (political) attitudes and behavior. In general, survey data do not just speak for themselves, they require a careful interpretation within the context in which they are generated. This holds for any (national) survey, but it becomes even

more apparent in a cross-national setting. A question may have a different meaning in a different political and cultural system, even when great care is exercised in aiming at 'functional equivalence'. A comparison of marginal distributions across nations has some heuristic value, but it does not lead to meaningful theory construction. It is more useful to look for patterns of associations, e.g. the impact of degree of political interest on issue evaluations, and to compare on the level of these relationship patterns. In a way, we can look at such an analysis as an instantaneous eleven-fold replication of a relational hypothesis. Our first round of analyses has produced few, if any hypotheses which can be successfully replicated this way. Matter of fact, particular in the area of issue voting, we have come across a surprising number of sign reversals, i.e. the same two variables show a positive relationship in some countries and a negative one in others. This strongly points to the need to assess the survey data in the light of other country-specific sources of information. Detailed country-specific analyses (the second stage in our analytic strategy) then go way beyond mere idiosyncratic description. Their prime objective is a "cross-nationally informed country-specific" analyses which will focus on singular and deviating patterns. In turn, these will provide the base for a second, higher level of comparison.

At this point it is premature to predict the possible returns from this three stage comparative strategy. We may find a considerable amount of higher level communality, or we may conclude that idiosyncratic systemic factors tend to dominate, severely curtailing efforts of location-independent theory building. But even if our group fails, a valuable host of data will be available to the other researchers with all sorts of brilliant ideas in the very near future. The social science community is fortunate to have the services of many fine data archives available. Their supporting role is vital for the further growth of the social sciences.

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# BIBLIOGRAPHIC REFERENCES FOR COMPUTER FILES IN THE SOCIAL SCIENCES: A DISCUSSION PAPER

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by Sue A. Dodd<sup>1</sup>

## BACKGROUND

A recent discussion among the participants of the E-Mail "Informal List for Official Representatives of ICPSR" centered around citing computer files in references, footnotes, and bibliographies; whether to cite a codebook or file (providing you have both); and a discussion on citing primary or secondary sources. With respect to the last two concerns, there appeared to be adequate response indicating that it is better to cite the file as opposed to the codebook, and that one generally cites primary data sources. However, the first concern required more information and the ICPSR OR meeting was targeted as the next opportunity for such a discussion. Note: this paper was first presented at the ICPSR OR Annual Meeting in November 1989, but has been revised for the May-June 1990 IASSIST meeting in Poughkeepsie, N.Y.

## IDENTIFYING THE PROBLEM

There is good and bad news. The good news is that researchers are beginning to cite computer files in the reference sections of social science journals. The bad news is that for every person who does cite his or her data source, another twenty to thirty continue to provide no citations. This means that valuable data sources will not be indexed by bibliographical services such as Social Science Citation Index; and more importantly, the next researcher who would like to analyze these data may not have sufficient information to acquire them. Despite efforts to provide researchers with examples and information on how to compile a data file citation, the overwhelming majority continue to describe data sources within the text of their articles, but do NOT follow-up with a citation in the reference section.

The March 1981 issue of Social Forces was the first time that a major social science journal had provided instructions (in the "authors' guide" section) on how to cite a machine-readable data file (MRDF) — currently referred to as a "computer file."

To see if this effort had any impact on the number of computer file citations that could be visibly detected in the reference sections of Social Forces, I took a two year eye-readable sample for 1988 and 1989. Out of approximately 90 articles describing some form of secondary analysis, there were only 12 computer file citations. One of the citations had its own unique style (see below), but

it nevertheless included enough information to gain access to the data. The point being that it is better to err in-the-effort than not to give any information.

Inter-university Consortium for Political and Social Research, 1979. ICPSR study 7708 Data Description. Police Departments, Arrests and Crime in the U.S., 1860-1920, Principal Investigator: Erick Monkkonen. Ann Arbor.

There were several citations for codebooks, which I assumed to be an indirect way to cite the actual data; and with one or two exceptions, most references to census information came in the form of the GPO printed documents. What this means is that we must renew our efforts to educate and encourage researchers to cite actual data sources. We must also encourage editors and review boards within the various social science disciplines to do likewise. How can we do this and what role can IASSIST members play? Here are some suggestions:

— IASSIST should undertake the task of publishing a small pamphlet or work that would provide sufficient instructions and examples of bibliographic citations for computers files. Such a publication would offer a researcher the luxury of a personal/desk reference source easily retrieved when needed. Apparently, the information provided as part of the data acknowledgement form and that given in certain codebooks is not getting the proper attention. This work should reflect the editorial styles of different social science journals including the American Journal of Sociology, the American Sociological Review, Social Science Information, Government Publications Review, Demography, and the American Political Science Review.

— IASSIST might also want to sponsor an announcement reminding researchers to cite their data sources. This public announcement might read: DON'T FORGET TO CITE YOUR COMPUTER FILES ... It should be sent to the various social science journals, and space permitting, it is likely that they would run it. Another announcement might be jointly sponsored by several editorial boards e.g., THE FOLLOWING EDITORIAL BOARDS ENDORSE THE PRACTICE OF CITING SOCIAL SCIENCE DATA SOURCES ... The various Associations' Newsletters might also be a vehicle for this type of

announcement.

— Individual IASSIST members should contact editors and discuss the importance of citing computer data sources in references. Point out that researchers are OBLIGED to cite machine-readable sources as well as the printed ones. In addition, this practice should be encouraged so that no data source is described within the text of the article without it also appearing in the reference section.

— Individual members should contact review boards and authors that prepare or oversee “style manuals” — including the Chicago A Manual of Style and Kate L. Turabian’s A Manual for Writers. Note: As I was preparing this paper, I discovered a new manual put out by the American Political Science Review entitled Style Manual for Political Science.

— Individual members should assist ICPSR in their efforts to provide quality control over bibliographic descriptions of data files and accompanying documentation. Better control over bibliographic elements facilitates the citation process. The ICPSR staff is making valiant efforts in this regard, but need more guidance and feedback. For example, when IASSIST members discover any discrepancies between the bibliographic elements on a title page and those presented in a citation on the verso of the title page, then this should be pointed out so that it can be corrected.

— IASSIST members should get more involved with the national and international groups dealing with standards associated with computer publishing, production and access. Social science data producers are in the minority compared with computer software producers. Without more active involvement and visibility, decisions are made that exclude the needs of social science data users. For example, there is a National Information Standards Organization (Z39) committee — known as the NISO Committee FF: Computer Software Description — that includes information on bibliographic citations for computer software. However, there is no similar effort for text or data files.

It is not possible in this discussion paper to provide anything but brief examples, but more detailed instructions on the components of a bibliographic citation are provided in the JASIS article (Dodd, 1979) and in part three, chapter 9 of Cataloging Machine-Readable Data Files (Dodd, 1982).

Using different editorial styles, the following examples of bibliographic citations are given below. In most cases, the computer file in question is considered a “published work” or book equivalent — even though some computer files in the social sciences do not have “sewn or glued bindings” nor are they always boxed and sealed in packages. The composition of the citations are according

to the style of the respective publication and are adhered to by the author with the exception of the bracketed information designating the computer-readable format.

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**ELECTRONIC JOURNAL MATERIAL**

A new phenomenon brought about by computer technology is the so called "electronic journal." Computers have changed the way that scholarly articles are created. For example, articles may be prepared using computers and word processing programs, then sent to colleagues for review via EMail and computer networks, and later returned to the author. Once completed, they are submitted to a discipline-related electronic journal and/or computer list-server for storage and access on demand.

An example of an electronic journal is the Public Access Computer System Review (PACS Review). This journal focuses on "public access" computer systems that libraries make available for patron use. Articles are stored as files on the PACS Forum list-server. The table of contents section of the Review is sent to all PACS Forum users, who can retrieve articles of interest from the list-server by following the instructions contained in that section. PACS Review is published three times a year, has an editorialboard and is copyrighted. It also features special departments and reviews of others works. The first volume and issue appeared in January 1990.

Because standards and past traditions fall behind technology and the capability to produce computer-generated works, there are no definitive "guidelines" for citing an article that appears in an electronic journal. However, common sense plus building on what is currently in place, makes the leap from print to computer-readable a manageable feat. The following examples reflect articles that have appeared in PACS Review.

Morgan, James Jay. 1990. "Expansion and Testing of a Meridian CD-ROM Network" [computer file]. Houston, Texas: Public-Access Computer System Review. Electronic journal. 1(1) 34-42. (Access via EMail "GET MORGAN PRV1N1"

LISTSERV@UHUPVM1 or  
LIB3@UHUPVM1.BITNET)

Stigleman, Sue. 1990. "Text Management Software" [computer file]. Houston, Texas: Public-Access Computer System Review. Electronic journal. 1(1)5-22. (Access via EMail "GET STIGLEMA PRV1N1" LISTSERV@UHUPVM1 or LIB3@UHUPVM1.BITNET).

**ON-LINE DATABASES TREATED AS SERIALS**

Many computer works take the form of true serials or ongoing databases (sometimes called "dynamic databases"). They can be cited in bibliographies just as other types of computer files. The only difference is that they have a beginning date and ending date — provided the serial is complete. For those that are continuing, then only the beginning date is given, followed by a hyphen and blank spaces.

University of North Carolina. 1989- IRSS Catalog of Data Holdings [computer file]. 3rd ed. Chapel Hill, N.C.: Institute for Research in Social Science. On-line database. (uirsss@uncvml.bitnet).

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**EMAIL AND COMPUTER RELATED ITEMS**

Use of electronic mail and networks among social scientist has grown rapidly in recent years, but most are only using a fraction of the power and resources available world-wide. Networking in the future will be the way to access and disseminate data resources — especially if the cost remains so low. Tapping into these data resources and alerting others to their availability becomes the responsibility of all the EMail and network users. Just as with unpublished manuscripts, thesis, dissertations, or letters, there are ways to give credit to authors and provide sufficient information for subsequent access.

Works created using the computer and later circulated via EMail and networks would most likely fall into the category of unpublished material and more specifically "typescripts." In fact, to coin a new phrase, they would more aptly be



called "computerscripts."

When citing unpublished or forthcoming computer works such as an EMail letter, thesis, computer-readable article, etc., be descriptive about the nature of the item and include as much information as is reasonable.

Jones, Paul. 1989. "What is the Internet?" Academic Computing Services, University of North Carolina at Chapel Hill. EMail. (pjones@samba.acs.unc.edu).

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<sup>1</sup>Presented at the IASSIST 90 Conference held in Poughkeepsie, N.Y. May 30 - June 2, 1990.

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# (An Outline of) The Impact of Future Social and Technological Trends On the Dissemination of Census Bureau Information

by Donald L. Day<sup>1</sup>

## ABSTRACT

This study examines social and technological trends that may impact the dissemination of U.S. census information via the Depository Library Program in the Year 2000 and beyond.

The study looks beyond currently emerging systems to examine a limited list of future issues in technology, regulation, funding, access, and user demand. It examines information dissemination in the broad, societal context, rather than concentrating narrowly upon the means of delivery. Its main objectives are to pinpoint key issues, to stimulate an appreciation of the inextricable nature of information in postindustrial society, and to recommend policies and directions for further research.

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## STUDY METHOD

Elite interviewing was interspersed with a review of literature in the future studies field.

## KEY RESEARCH QUESTIONS

The key research questions drafted from an analysis of the literature and during the interviewing process were as follows.

### TECHNOLOGY

1. What will be the leading edge information technologies in the first decade of the next century?
2. When and to what degree will depository library materials (especially census data) be distributed via CD-ROM or other machine-readable media?
3. What technological developments will affect patrons' remote electronic access to depository libraries?
4. What software and data structures will be required for electronically disseminated census data, to facilitate rapid and effective searches and retrieval?

### REGULATION

5. What will be the sponsorship and impact of standardization efforts to facilitate network access to federal government information?
6. To what extent will anti-trust concerns inhibit development of data integration protocols and telecommunications software necessary for widespread network access to federal government information?
7. How will the distribution of government information be controlled, under whose auspices and with what objectives?
8. How will data integrity be maintained without impeding widespread electronic dissemination of information?

### FUNDING

9. Which sponsors of information production, dissemination and use will support high technology access, under what conditions and with what goals?
10. What are the prospects that Congress will choose to privatize depository library distribution? What impact would that have upon the quality, quantity, availability and cost of Census Bureau information?

### ACCESS

11. What will be the minimum skill levels required of users and depository librarians in accessing electronically disseminated information?
12. To what degree might user fees and other costs of accessing electronically disseminated information disenfranchise individuals?

### USER DEMAND

13. What impact will changes in work force composition and employment arrangements have upon the types of census information sought by users?

### OVERVIEW OF FUTURE TRENDS

- Strong rise in "knowledge industries"
- Increase in non-English speakers
- Swelling ranks of citizens over 65

- Spending will continue to shift toward service industries (88% of work force in 2000)
- Job retraining programs for 4% of work force
- Seventy percent of U.S. homes may have computers in 2000
- People changing careers an average of every 10 years
- Ranks of the self-employed will grow at a faster rate than salaried workers
- More mid-career professionals will become entrepreneurs
- Do-it-yourself activities will be popular, because a 32-hour work week will create more leisure time and due to the high cost of services
- Massive increases in storage technology
- Inferred major policy issues
  - > privacy
  - > the part government plays in information dissemination
  - > intellectual property rights
  - > functional literacy

## KNOWLEDGE IN POSTINDUSTRIAL SOCIETY

Social organization will be shaped by intellectual technology in postindustrial America in accordance with what is known as the "Knowledge Theory of Value".

Knowledge, even when it is sold, remains with the producer. It is a "collective good" — once it has been created, it is available to all. There is little incentive for any single person or enterprise to pay for the production of knowledge unless a proprietary advantage (such as a patent or copyright registration) can be obtained. Thus, government policy in regard to intellectual property and contractor marketing of publicly funded products will be key in the management of future information dissemination technology.

A reduction in incentives for individuals or companies to produce knowledge will cause the responsibility for and costs of satisfying information needs to fall to government. Whether information dissemination is "privatized" and in what manner may affect the availability of that information significantly.

## THE U.S. AS POSTINDUSTRIAL STATE

### *The optimistic view*

1. Centrality of theoretical knowledge as the basis of innovation.
2. Creation of new intellectual techniques to engineer

- solutions to economic (and even social) problems.
3. The spread of a (technical and professional) knowledge class.
4. The change from goods to human services.
5. A change in the character of work (people must learn to live with one another, since interaction among groups will be key).
6. The employment of women in expanded human services.
7. Science as the societal standard bearer.
8. Political units comprised of either vertical organizations of individuals into scientific, technological, administrative, and cultural centers, or of institutions arrayed as economic, government, university, or social complexes.
9. Meritocracy (an emphasis on education and skill).
10. Scarcities of information and of time.
11. The economics of information.

### *The pessimistic view*

New technology ...

1. Will be highly beneficial to some segments of society, but detrimental to others.
2. Will have a positive impact primarily in the middle-class suburbs, with a negative impact in central cities.
3. Will not be properly understood and regulated until considerable damage has been done in major urban development.
4. Will reduce the economic viability of the central city by accelerating delocalization of business and commerce.
5. Will affect the service sector most, because its processes involve paper transactions that are particularly sensitive to technological substitution.

## FIVE MAJOR AREAS THAT MAY AFFECT FUTURE DISSEMINATION

1. Technology
2. Regulation
3. Funding
4. Access
5. User Demand

### • *Technology*

- > Leading edge technologies
- > Machine-readable media
- > Remote electronic access
- > Software and data structures

### • *Regulation*

- > Standardization
- > Anti-trust concerns
- > Control of distribution
- > Data integrity

- *Funding*
  - > Sponsors
  - > Privatization
- *Access*
  - > Skill requirements
  - > Disenfranchisement
- *User Demand*
  - > The aging population
  - > Changes in the work force
  - > Multilingual services

## KEY ISSUES

Should future information dissemination be oriented toward individual users or toward businesses and institutions?

Should joint ventures with private industry be pursued as a means of funding future dissemination in the face of a shrinking federal budget?

What policies should be adopted regarding intellectual property rights in data analysis, access software development and copyright protection?

How and where should advanced indexing and retrieval software be procured for access to machine-readable data?

What role should be played in coordination of federal information dissemination policy to eliminate fragmentation of jurisdiction over media, content and formats?

How should demands for multilingual presentation be addressed?

To what extent is the Census Bureau liable for ensuring the integrity of data disseminated in machine-readable formats?

Would the Census Bureau be accountable for invasion of privacy or threats to defense or industry confidentiality that might result from the ability to manipulate data in machine-readable format (the "mosaic" issue)?

To what extent should the Census Bureau be involved in establishment of network protocol and human interface standards both within government and within industry?

How should responsibility and costs be divided for creation and maintenance of on-line access networks?

Should the Census Bureau abandon the depository library program in favor of alternative means of data dissemination,

or be a driving force in effecting a restructuring of the program in keeping with new information needs and dissemination technology?

What types of training should be provided for depository library staff to better enable them to deal with the challenges of new technology?

To what extent should collection acquisition, operating and other funds be diverted to the purchase of hardware and software to support the use of electronically disseminated information?

Should the Census Bureau decide upon the medium and content of information disseminated based upon extent and type of use research?

## CONCLUSION

This study was fielded under the presumption that government will be required to continue providing public access to federal information as part of its commitment to maintaining the informed citizenry that is central to participatory democracy.

The nature of that access, however, is entwined in a host of social, economic and technology issues that must be addressed promptly if the pace of change is not to overwhelm policymakers as well as information intermediaries and users.

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<sup>1</sup>Presented at the IASSIST 90 Conference held in Poughkeepsie, N.Y. May 30 - June 2, 1990. Donald L. Day, School of Information Studies, Syracuse University

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# And the Walls Come Tumbling Down: The Converging Destinies of the Rutgers University Libraries and the Center for Computer and Information Services

by Linda Langschie<sup>1</sup>  
& Gertrude J. Lewis

ON OCTOBER 16, 1990, THE FOLLOWING MANDATE WAS ISSUED FROM THE OFFICE OF THE PRESIDENT OF RUTGERS UNIVERSITY...

"Complex interrelationships among print information, electronic data, resources, and telecommunications have opened enhanced possibilities for access to both information and communication for scholarly and management purposes. This sophisticated information and communications environment has, as a result, led to a convergence of many of the functions of libraries and computing services.... Bringing computing facilities and libraries under the same management will enable us to build on existing strengths, avoid duplication, and coordinate planning, thereby enabling us to improve service to users."

Now the directors of the academic and administrative computing centers report to the Associate Vice President for Information Services, who is also the Associate University Librarian for Technical and Automated Services. He reports to the Vice President for Information Services and the University Librarian.

## IN THE BEGINNING....

Two decades ago, representatives from Rutgers and Princeton universities met at Firestone Library, Princeton, to discuss means for acquiring the 1970 Census of Population and Housing data. The result of that meeting was the formation of a group calling itself the Princeton-Rutgers Census Data Project. A number of agreements were reached concerning costs, finances, billing for services, and procedures for acquiring data and software.

Three hundred reels of census data and a number of utilities to aid in accessing the data were purchased at that time. The census data was stored at the Princeton University Computer Center and upon request copies were made and housed at Rutgers University Center for Computer and Information Services (CCIS). Training seminars were made an integral part of the program. Funding for the Project came not only from the computer centers and libraries of the two universities, but also from some individual departments. Although not all contingencies were considered in the original agreement, the Princeton-Rutgers Census Data Project was founded in a spirit of cooperation and the belief that the primary

objective was to make the 1970 census data available to members of the academic community as quickly and as economically as possible.

As the census data project developed, a "Census Packet" was sent to Rutgers libraries and key academic departments. Originally it was felt that interested people should go to the library first and not directly to CCIS. Library staff would help patrons to understand available census data in printed and magnetic tape form. At first, the census data tapes were stored at Princeton, and the Rutgers users paid for programming and computer time to Princeton. Thus began our road of cooperation between the CCIS and the University libraries that continues today.

**THE CURRENT STATUS OF MACHINE-READABLE DATA FILES...**  
Now the Rutgers branch of the Princeton-Rutgers Census Data Project houses its own data tapes and has been active in three major areas: education, consultation and data retrieval. To facilitate the use of census materials, the CCIS has published many technical documents for faculty, staff and students that deal with locating, accessing, and analyzing census data. On the reference shelves of the libraries, are publications created by the CCIS staff in which the researchers can locate the names and corresponding codes of the census geographic areas in New Jersey or look up the index of machine-readable data files available to the Rutgers community. Information on the data acquisitions are publicized in the bi-monthly CCIS Newsletter.

However, census data is only a part of the extensive machine-readable data files (MRDF) collection services provided by the CCIS in conjunction with the libraries.

## *The Roper Center*

The libraries and computer centers of both Rutgers and Princeton University participate in a joint membership with the Roper Center's International Survey Library Association (ISLA). The universities are entitled to the research services of searching the archives, producing tabulations of data analysis, and acquiring machine-readable data sets. As part of this venture, we also subscribe to the Public Opinion Location Library (POLL) Database.

### *The Inter-university Consortium of Political And Social Research*

Membership in the Inter-university Consortium of Political and Social Research (ICPSR) provides not only the acquisition of data and accompanying documentation, but also the opportunity to attend workshops in the ICPSR Summer Session. Over the years, the librarians, computer personnel, and academic researchers have attended these classes and brought information back to our researchers on ICPSR's expanding resources. When the CCIS orders a data set from ICPSR, we receive a magnetic tape and an accompanying codebook in hardcopy. The tape is stored at the computer center and is available to anyone on or off campus who has a computer account. The codebooks are shelved in the CCIS Computer Reference Center (CRC), which is a small reference room, open about eighteen hours a week.

### *Data Base Advisory Committee*

As an increasing number of researchers discover the enormous volume of data produced which have intrinsic research and academic value, they realize that these data are unmanageable without the use of a computer. In 1976 through the coordination of the CCIS, the Political Science and Sociology departments, and the library, the responsibility of the handling of ICPSR and Roper machine-readable data was transferred to the CCIS. Although the Roper membership originated in the Sociology Department and the ICPSR membership started with the Political Science Department, the costs of these memberships come out of the library budget. The CCIS became responsible for the acquisition and maintenance of the various data sets. It was felt that a central clearing house for databases would eliminate duplicate purchases that had occurred. Under the CCIS, all communications from Census, ICPSR and Roper that might be of academic interest would be forwarded to the librarians, the appropriate department chairperson or representative.

A Data Base Advisory Committee was created to include participation with the various social science disciplines and with the libraries (again both Rutgers and Princeton universities) in order to determine general policies concerning acquisition and access. This committee meets periodically to keep up with the current activities in the field. As usage has expanded, representatives from other departments who wish to use the data can join the committee or participate as guests. The Princeton-Rutgers Census Data Project is no longer limited to its original mandate of providing the 1970 census information. It is now part of the overall data archive program which also incorporates the ICPSR, the Roper Center and the New Jersey State Data Center.

### *The New Jersey State Data Center*

In 1977, with the advent of computer sophistication and the use of the 1970 census data in machine-readable form, the anticipation of large amounts of 1980 Census of Population and Housing data prompted the Census Bureau to develop plans for improved services to data users. These user services included access to census data in reports, computer tapes, microform, trainings, and consultation. The basic concept involved state-related organizations operating data delivery and user service facilities with guidance and assistance from the Census Bureau. One of the more important resources and services to be made available was the Federal Depository Library Program, through which many libraries receive Census Bureau publications at no charge. During the time of the 1970 census data, these services had fallen short of users needs. Not all processing centers offered training, not all states had census processing services, and not all locations offered consultation on technical matters. The State Data Center Program was proposed to close the gap in these user services. Rutgers University, as a primary participant of the New Jersey State Data Center, has fulfilled its obligation to provide these services.

### *CONTINUING EDUCATION...*

As part of the regular education series, conducted by the Rutgers CCIS, a general introductory seminar in data archives is given. In addition, special seminars are also available on an individual request basis. Many of these seminars have been held with the librarians to help identify inquiries that we get in common, such as:

- a class for the reference librarians of the university emphasizing how to find out what is available by making use of different reference materials;
- a session on exposure to increasingly sophisticated techniques of research and manipulation of our machine-readable data files as part of a library instruction program to enhance the research capabilities of undergraduate honor students;
- a session on data archives for the librarians and the researchers on how to bridge the gap between the traditional library resource materials and the accompanying computer related material;
- a seminar on how to direct prospective users through documentation, codebooks and accompanying printed material;
- a class for the doctoral students of the School of Communications, Information and Library Studies on how MRDFs will help the researchers.

In each case, the content of the lecture has been tailored to the interests and level of computer expertise of the group. These seminars enhance the interaction of the librarians and the computer center personnel because they often confer by phone when handling inquiries on the data archives. Hundreds of researchers have been

assisted in this way. We began to realize that as the University Library utilizes the computer more and more for information retrieval, bibliographic searches, online cataloging and other functions, there will be an ever increasing working relationship between the Library and the CCIS.

#### THE CURRENT STATUS OF OTHER PROJECTS...

It is to Rutgers good fortune that there were people within the two units who were keenly aware of the overlapping nature of our work, and willing to take on the extra work of communicating across departments. And so we went forward with a number of cooperative ventures in the early years. The Census project got us going, and even before our merger, the CCIS and Library worked out several projects together:

#### *ICPSR Codebook*

One of the first joint reference-related projects we arranged was for the Research Libraries to acquire additional copies of ICPSR Codebooks provided at the CCIS. Any time a codebook is ordered by CCIS, the ICPSR automatically sends a second copy to the Library; in the event that the codebook is only available on tape, the CCIS runs off a paper copy for the Library. Thus, the CCIS copies serve as a stable reference collection, and the Library copies increase availability — through both our extended hours of operation and because we circulate the codebooks. The circulation policy enables our faculty and students in three distant campuses to have ready access to the codebooks through our document delivery systems. Formerly, researchers from Camden and Newark had to travel to New Brunswick just to see the codebooks.

#### *Online end-user searching*

End-user online searching at Rutgers has been addressed mutually, as well. Programmers at CCIS developed a special communications software for the Libraries' online end-user search service, entitled "kNightsearch." This software permits a masked password logon with an automatic self-destruct after one paid usage, and automatically terminates the session after the prescribed period of time. CCIS contributed not only their programming expertise, but also their Student Microcomputer Centers machinery as search terminals. The project was only partly successful: The Microcomputer Centers ultimately proved to be unsuitable environments for search; however, the software continues to be used in large science courses in the departments' own labs.

#### *Local mounting of databases*

As the Library further sought to enable patrons to gain access to online information, we began to investigate the mounting of databases locally. As an initial test project, for which the libraries invested seed money, we decided

to mount ISI's *Current Contents* database, through the BRS OnSite program. Once again we turned to CCIS for their assistance in determining the technical needs, and for use of their mainframe. Having *Current Contents* available locally will allow researchers to search for titles directly instead of going through one of the commercial database vendors, like Dialog. Although both of CCIS's mainframes, an IBM compatible and the VAXcluster were very heavily used, it was determined by the CCIS systems staff that if we purchased an additional disk, we would be able to run *Current Contents* on the CMS operating system of the IBM. However, when we tested the system, with two groups of about fifteen librarians each, using a bench mark program developed by the librarians, we brought the CMS operating system almost to a halt.

By this time, we were already committed, by contract, to both BRS and ISI, and what we mainly had to show for all our efforts was a system with a response time that was too slow to be acceptable: to quote one member of the test team, "By the time you get a response, the Contents aren't Current anymore." Most unfortunately, we had lost the chance for a trial period, where we could have detected the problem before committing ourselves in a contract, because of the amount of time that it took to communicate up two separate administrative ladders — the Library's and the CCIS's. This project serves as an example of how front-line efforts need coordinated support from administration in order to succeed.

#### *Online interface to data*

The Libraries have provided an online interface to CCIS-held polling data from the Roper Center since the introduction a few years ago of POLL, the Public Opinion Location Library. The Library offers searches of the database to identify appropriate surveys, and the CCIS provides data retrieval. Similarly, the Library can search the ICPSR Guide to Resources and Services for researchers online before they approach the CCIS for data. Furthermore, the library subscribes to and performs searches of some numeric databases produced by the U.S. government, and the state of New Jersey. For example, the New Jersey State Data Center/Business & Industry Data Center Electronic Bulletin Board provides access to data prior to publication. Data is downloaded in either ASCII or Lotus 1-2-3 format for post-search manipulation. Again, we see a blurring of distinction between the kinds of information provided by the Libraries and the CCIS.

One important addition will be the availability of the government information on CDROM. Some of these data will be distributed to depository libraries by the Government Printing Office. Users can download the data and access with a commercial data base product. Again



librarians and computer programmers will investigate and support this media.

#### *Student Microcomputer Project*

The creation of the Student Microcomputer Project was another result of sharing the resources of the two units. About five or six years ago, due to a tuition supplement, different university governing bodies, which included student representatives, voted on buying microcomputers for non-classroom use. One of the student stipulations was to have them placed in the libraries so access would be during normal library hours and library resources would be available to them. Macintosh and AT&T microcomputers were purchased and placed in four locations on the main campus. While the libraries agreed to provide precious physical space, the CCIS agreed to maintain the computers and give general support. As a result, this has proven to be one of the most successful projects that has greatly benefited students. The microcomputer areas are staffed by trained students; software and documentation are available on site. Each semester, seminars are held on operation of equipment, word processing, spreadsheets, databases and graphics. After the initial expenditure, the university provided funds in its ongoing budget to support the program.

#### *Software Information Center*

In almost any field, computers have become as essential as books, and in fact, in some instances, are even replacing books. To address this issue, the Software Information Center (S.I.C.) was established as a centralized forum for identification, evaluation, and sharing of software for the entire university. It also serves as a liaison to other consortia engaged in academic software development and exchange program. At the center, faculty and graduate students can preview various software packages; the range of courseware available is wide and holdings are constantly being expanded. The programs are available for both IBM and Macintosh microcomputers. In addition, assistance in using authoring programs is provided to help faculty develop their own courseware. The software collection is cataloged in the Integrated Rutgers Information System (IRIS) as a joint project with the University Libraries. IRIS is a computer database that contains the records for books and other material cataloged for the Rutgers Libraries and networked by the CCIS.

#### *IN THE FUTURE ...*

##### *Networking*

Networking, which is a scheme for connecting computers, is now on the horizon as the most important aspect of communicating between and among clients. We can reach most national and international networks but not all campus buildings. Most academic buildings on the campus where the main computer center is located are

linked by a campus-wide broadband system. In addition, there are networks at each of the four remote computer locations. Now, with the merger of the libraries, academic computing and administrative computing, we are embarking on connecting all personnel electronically so that everyone will have access to an electronic mail box. This certainly will stimulate demand for computers. The logistics have to be worked out: significant upgrades will be required for existing systems; standards will have to be established to determine which system(s) will be used and how to handle capacity issues. We have a big job ahead of us. This can only be done through cooperation among those departments that provide information services to the university.

#### *National Center for Machine-Readable Texts in the Humanities*

Rutgers and Princeton Universities have received grants from the National Endowment for the Humanities, the Andrew W. Mellon Foundation, and the New Jersey Committee for the Humanities to jointly undertake the planning for a national center for machine-readable texts in the humanities. Project staff from Rutgers University includes the Associate University Librarian, an associate director from CCIS, and a member at large along with similar personnel from Princeton University and representatives from the Research Library Group.

During the course of the planning period the project staff will be investigating issues relating to the establishment of a cooperative center which will act as a central source of information on humanities data files and a selective source of data files themselves. The initial goals of the Center are to continue the on-going inventory of machine-readable texts; to catalog and disseminate this information; to acquire, preserve and distribute the textual data files which otherwise become generally unavailable; to distribute such data files in an appropriate manner; and to establish a resource center/referral point for information concerning other textual data. Other issues such as initial setup costs, administration of the project and the feasibility itself are also under investigation.

The Center plans to complement and enhance these collections by bringing bibliographic control to existing data files. To that end the project staff will be networking with other centers to establish appropriate means of collecting inventory data for the cataloging of archival holdings.

#### *Library Committee on Cataloging Machine-Readable Data files*

The CCIS Machine-Readable Data Files Committee was formed by the Technical and Automated Library Services to study how the cataloging of the data files housed at

CCIS should proceed. The purpose of this study is to make the university aware of this collection, to strengthen the existing liaison between the libraries and the computer center, and to make a contribution in the area of computer file cataloging.

As yet, the MRDFs are not accessible to the Rutgers community via the libraries online catalog system neither are a large number of codebooks which accompany these files. Computer personnel have and will continue to work with the librarians on creating these catalog entries. Recommendations, as a result of this study, are that cataloging the data files and codes should be performed by librarians and administered by the Special Formats Cataloging section. It is just a matter of time before this project will begin.

#### PROBLEMS AND SOLUTIONS

Researchers need information, and do not particularly care where the information resides within the university. As is implied throughout this paper, some of the distinctions that the Library and CCIS make between our services tend now to be rather artificial, maintained more out of habit than by design. We need to rethink our roles from the point of view of the patron in need of information, to break from tradition when appropriate, and create information systems that are responsive to our constituency.

Across the years, the Libraries and CCIS have both committed staff, time, machinery, and hard cash to common causes. We have done a great deal, voluntarily, and together. Yet it must be said that in what we did, there were often problems; and moreover, there was so very much more left to be done.

#### *On the front lines...*

Yes we communicated. And yes, we did not. The problem, I believe, on the Library's part went to responsibility. While it is wonderful for individuals to voluntarily take on new and cooperative projects with another unit, the lack of formal responsibility led to things simply falling through the cracks. For example, when we began to collect a duplicate copy of the CCIS copy of ICPSR Codebooks, back-ordering was assumed, and the availability was publicized enthusiastically in Library and CCIS newsletters. So, we were very red-faced when a faculty member from our Newark campus, some thirty miles distant, responded to our much-publicized tout about availability of codebooks, and asked for the entire run of codebooks for the Annual Housing Survey. We were able to provide only codebooks from the past few years, as our subscription turned out not to be retroactive. The oversight was not caught because there was no-one who's job it was to catch it! And this is just one example of a small detail which nevertheless hinders information

access to the researcher, and erodes our own credibility, as well.

One step that the Alexander Library, which is the research library for social sciences and humanities research at Rutgers, has taken to try to address this situation, is to designate a librarian to serve as coordinator for non-bibliographic database services. Besides working with the above-mentioned numeric databases, that person's natural function will be to work in concert with appropriate CCIS staff to see that researchers working along those "blurry" lines are guided along the most direct path to needed information.

#### *On the administrative end...*

Rutgers University's former president, the late Edward Bloustein, was a primary mover in the merger of the University's computing activities, articulating the need for coordination of the complex interrelationships between print information, electronic data resources and telecommunications. At a time when resources are limited and budgets strained, this plan of pooling resources, while perhaps not showing actual dollar savings, is intended to produce "intangible" savings via a streamlined and more efficient organization.

So, in order to coordinate the complicated, yet obviously converging, activities of the computing organizations on campus, a recent restructuring brings the Libraries and the computer services under one organizational umbrella. All units now report to the Vice President for Information Services at Rutgers, and University Librarian, Joanne Euster. President Bloustein also appointed Peter Graham, Associate University Librarian for Technical and Automated Services, to serve as associate Vice President for Information Services, in addition to continuing with his current responsibilities.

Joanne Euster explains the administrative rationale for restructuring in this way: "Economies of scale, as well as an apparent fading of the distinction between administrative and academic computing suggest that those functions should at least share some of the same pool of expertise and infrastructure. The goal should include minimizing duplicate input of information, ensuring the integrity of shared databases, being cost efficient, and making possible optimum individual control of one's own data access and utilization." Basically, this concept recognizes that the three affected units have tasks that are distinctive, and which are well-served within the unit, but that there are also certain aspects of the operations. For example, the academic and administrative sides of the computer share CPUs; the library and academic side share data; and the administrative side provides its registrar's and personnel tapes to the library for its online patron file.

Already, the administrative restructuring is having an effect on front-line services. Our plans to mount the *Current Contents* database have been resurrected thanks to the Associate Vice President for Information Services' decision to purchase a new mainframe computer that will fit our needs. The organizational changes provide new opportunities to expand the cooperative tradition of the Libraries and the CCIS, building on existing strengths, and exploring new ways of improving our services to Rutgers faculty and students. Our aim is to provide a "seamless" system of information services to data users.

#### IN CONCLUSION...

Computing services have changed. Library services have changed. Research methods have changed. Whether it becomes the responsibility of the library or the computer center to respond to change and meet new challenges is a moot issue. The clients continue to require information and increasingly this information is available in machine-readable form. Although the library and the computer center are independent of each other and deliver different forms and types of services, some of the information services overlap. The computing environment grows more complex each year and correspondingly, the responsibilities of our staff become more demanding. Because new technologies require us to be technically proficient in these areas, the merger of the libraries and the academic and administrative computing centers make sense. Because of the current budget restraints, these tasks must be clearly defined. Because of different perceptions of the type and level of service needed, there will be challenges in meshing these services. But with our long history of successful collaboration, the outcome of this new relationship is assured. And the faculty, students and staff will be the beneficiaries.

Presented jointly to the International Association for Social Science Information Service and Technology (IASSIST) Conference on "Numbers, Pictures, Words and Sounds: Priorities for the 1990's" Poughkeepsie, New York on June 2, 1990. Linda Langschied, Information Services Librarian, Alexander Library, Rutgers University, New Brunswick, New Jersey, & Gertrude J. Lewis, Deputy Associate Director, Center for Computer and Information Services, Rutgers University, Piscataway, New Jersey

## 3480 cartridges.

For those interested in 3480 cartridges:

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This paper covers the "mechanical & technological future of the systems" & "provides valuable information to data center managers data librarians, and archivists, in fact to all who are concerned about the long-term storage of machine-readable data."

*The following announcements are from the online version of the NLS Newsletter, submitted by J. Cassell<sup>1</sup>*

## **NLS Newsletter**

# **The National Longitudinal Surveys of Labor Market Experience, Summer, 1990, No. 64**

### **NLSY 1988 DATA/DISC RELEASES**

The various 1979-1988 NLSY data tapes and CD-ROMs are scheduled for release this fall. Brief descriptions of each data set highlighting new features of the upcoming releases and providing cost/ordering information appear below. More complete descriptions of the contents and structure of the NLS data collections can be found in the NLS Handbook 1990 now available from the NLS Public Users' Office. For those persons interested in placing an order, tape/disc order forms are provided via NLSERVE.

**NLSY 1988 Youth Survey.** Data continued to be collected during the 1988 fielding from 10,465 respondents or 90.2% of the NLSY sample remaining eligible for interview. A wide range of new and repeated topics from earlier survey years was included in this year's survey: (1) A new set of questions was added on respondents' knowledge of how AIDS is contracted and the extent of instruction/education that respondents' school-age children have received about AIDS. (2) Retrospective information was collected on persons other than biological parents with whom respondents resided from birth to age 18. (3) A confidential drug use supplement containing questions on lifetime and most recent use of marijuana and cocaine was fielded. (4) Questions on alcohol use similar to those asked in previous survey years were repeated and new questions on relatives who were problem drinkers including length of time respondent resided with such relatives were added. (5) For the first time, work-related injury information including type of injury and its impact on employment was included within the health section. (6) Child care information was collected from all mothers including a first three year's of life retrospective for all children. (7) The 1988 Employer Supplement included questions on promotions received as well as, for displaced workers, reasons for plant closings. (8) An expanded fringe benefit section and questions on supervisory responsibility and work performed at home were added to the CPS section. (9) Finally, the supplemental fertility file, last released in 1986, has been updated with the newly collected 1987 and 1988 birth record information.

The 1979-1988 main youth data are available on magnetic tape as raw data files (\$375) or SAS system files (\$400) as well as on compact disc (\$20). Single year files of data from the 1988 survey only is available to persons wishing to update their current collection. This single year release also contains an update file of corrections to all known errors found in NLSY data and documentation since the 1987 release. Complete hardcopy documentation is provided with magnetic tape orders. Persons ordering the CD-ROM should select from the various supplemental documentation sets listed on the CD-ROM order form.

**NLSY Supplemental Geocode Data.** The 1979-1988 geocode data are being released in a new format with new documentation. This specially constructed data file provides geographic variables based on information collected during fielding of the main survey, e.g., county, state, SMSA of current residence, coupled with selected variables for the county of current residence extracted from the County & City Data Books. NLSY geocode variables beginning with this 1988 release are divided into separate files reflecting the individual survey years, e.g., GEO79, GEO80, etc. The number of 1979-1982 variables has been reduced to make the types of variables available for the initial survey years more consistent with those provided in subsequent years. A codebook depicting the title, file name, and frequency for each variable has been developed and background documentation on the procedures utilized to create the geocode files has been expanded.

The geocode data are available on magnetic tape as raw data files (\$100) or SAS system files (\$100) as well as on the NLSY compact disc (\$20). Persons interested in this data set must agree to protect the confidentiality of these data and sign geocode license agreements prior to purchase. Complete hardcopy documentation is provided with magnetic tape orders. Persons ordering the CD-ROM should select from the various supplemental documentation items listed on the CD-ROM order form.

**NLSY Workhistory Data.** This data set provides a week-by-week longitudinal work record of the labor force attachment of each NLSY respondent from January 1978 through the 1988 survey date. The weekly variables are arranged in three primary arrays: (1) an A array of the respondent's labor force/military status each week beginning in January 1978; (2) an HOUR array of the usual hours worked per week at all jobs beginning in January 1978; and (3) a DUALJOB array containing job numbers for respondents who worked at more than one job in any week beginning in January 1978. The workhistory data also include information on dates of

active military service, selected key labor force variables, and detailed data on each of up to five jobs per survey year. Key linkage variables are provided to facilitate use of this data set with the main youth files.

The workhistory data are available on magnetic tape as a raw data file (\$125) and on compact disc (\$7). Complete hardcopy documentation is provided with magnetic tape orders. Persons ordering the workhistory CD-ROM will find the Supplemental Workhistory Documentation package essential.

**NLSY 1988 Child Assessments.** The 1988 battery of child assessments was administered to 6,266 children of female NLSY respondents. The 1988 survey round for the most part repeated the 1986 child cognitive, achievement, and socioemotional measures for all children who were age-eligible. Eligible children took the following assessments: (1) Body Parts, (2) What I Am Like, (3) PIAT Math and Reading, (4) the HOME, (5) Motor/Social Development, (6) Behavior Problems, and (7) Temperament. Children who were age-eligible in 1988 to take Memory for Location, Verbal Memory, PPVT, and Digit Span who had not completed these assessments in 1986 took the assessment in 1988. All 10- and 11-year olds repeated the PPVT and Digit Span assessments in 1988. The Spanish version of the PPVT-R, the TVIP (Test de Vocabulario en Imagenes Peabody) was administered for the first time to children whose first/primary language was Spanish. New data collected from the Child Supplement included information on the number and types of accidents, injuries, and illnesses requiring medical attention/hospitalization. New questions on parental efficacy and school performance were included within the Mother Supplement. Finally, a new Child Self-Administered Supplement for children ages 10 and over was fielded. This supplement probed into child-parent interaction, child employment, school satisfaction and success, after school supervision, religion and church attendance, substance abuse, interaction with peers, attitudes toward the future, and sexuality. All of these data will be available this fall on the Merged Child-Mother File.

**NLSY Merged Child-Mother Data.** This combined data set which merges information on children and their mothers from the 1979- 1988 main youth files and the 1986 & 1988 child assessments will be released this year as a single data set. Profiling the 7,346 biological children born to the 3,822 NLSY women identified as mothers, the merged child-mother file contains: (1) information on each child's family background, family employment and education, household composition, prenatal and postnatal care, child care experiences, and

assessment measures from the 1986 & 1988 child surveys; as well as (2) information on each child's mother's family of origin, marital history, income and earnings, employment, household composition, health and deviance histories, and attitudes and aspirations.

The child data are available on magnetic tape (\$100) and on the NLSY compact disc (\$20). Complete documentation is provided with magnetic tape orders. Persons acquiring the CD-ROM are encouraged to select from the various supplemental documentation sets, survey instruments, and user's guides listed on the CD-ROM order form.

**Ordering Information.** Persons wishing to place an order are encouraged to complete the tape/disc order forms available via NLSERVE (files TAPEORDR.FORM and DISCORDR.FORM). Payment in full or a purchase order should accompany each order. If shipment is to be made outside of the continental U.S., a handling fee must be paid prior to shipment (see shipping charges below). Order forms and payment should be returned to the NLS Public Users' Office, 921 Chatham Lane, Suite 200, Columbus, Ohio 43221, 614-442-7300 or BITNET:USERSVC@OHSTHR. Make checks payable to the Center for Human Resource Research. Orders will be filled on a first-come first-served basis.

**Shipping Charges.** To cover costs, the Center now charges a handling fee to persons ordering NLS materials (magnetic tapes, CD-ROMs, documentation, and publications) that are to be sent out of the continental United States. Such users should specify on the NLS order form the type of foreign mail service desired (air or surface). Upon receipt of an order, the Center will calculate the actual cost for the materials and type of mail service requested and will notify the customer of the handling charges for that order. Shipment will be made upon receipt in US dollars of both the cost of the items ordered and the handling fee.

<sup>1</sup> Casell, Jim. 1990. "New data available from NLS" [computer file]. Chapel Hill, North Carolina: SQS-L. Electronic listserv. (LISTSERV@UNCVM1).

# Invitation for Comments

COMMITTEE ON NATIONAL STATISTICS  
NATIONAL ACADEMY OF SCIENCES  
2101 Constitution Avenue, N.W., Washington, D.C. 20418  
Panel on Confidentiality CNSTAT: (202) 334-2550  
and Data AccessSSRC: (212) 661-0280

Many users of federal statistics are aware of the balance that must be struck between protecting the confidentiality of information provided by persons and businesses for statistical purposes and the need to make publicly collected data widely available for legitimate research and statistical uses.

In search of new ways to deal with this issue, the Committee on National Statistics and the Social Science Research Council, with support from several Federal agencies, have convened a Panel on Confidentiality and Data Access. As part of its two-year study, the Panel, which had its first meeting in December 1989, will be compiling relevant information from both producers and users of federal statistics.

The scope of this panel study includes publicly supported statistical data collection activities on individuals and establishments, such as censuses, surveys, administrative record data (when used for statistical purposes), and epidemiological studies. Data from clinical trials, while very important, will not be considered in this study. There are some special issues associated with clinical trial data that would require a separate study focusing on the bioethical aspects of confidentiality and data access.

Readers of this notice are invited to submit short statements on any or all of the following subjects:

**Access problems.** Specific examples of instances where Federal agency confidentiality laws or policies have made it impossible for you or your colleagues to obtain data needed in your work or caused excessive delays in arranging for access to the data. Please indicate the sources and specific kinds of data desired and the purposes for which the data were needed.

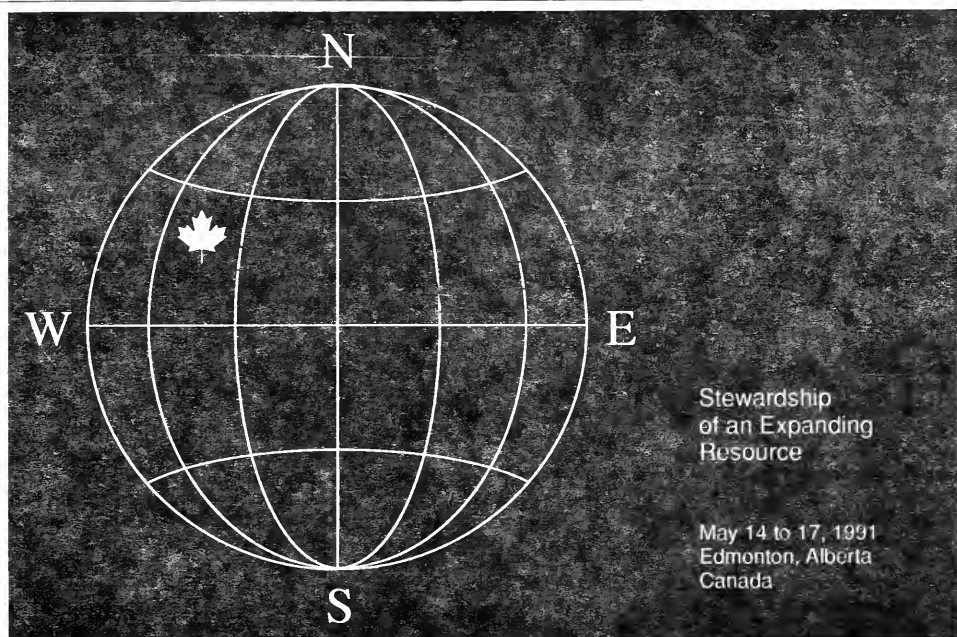
**Suggestions for improving access.** Have you had any experience in obtaining access to data not disclosed for general public use? How was this arranged? Do you have suggestions for improving data access with appropriate safeguards to maintain confidentiality and without undue risk of adverse effects on public cooperation with censuses and surveys?

**Persons or businesses harmed by disclosure.** Do you know of any instances in which persons or businesses were harmed by unlawful or unintended disclosure of information they provided to the government under the condition that the information was to be used only for statistical purposes? How did this happen? What were the consequences? (This category differs from the first two in that statements need not be based on your own personal experience.)

Please submit your statements to me c/o Committee on National Statistics, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington DC 20418. If you have any questions, please call Virginia de Wolf, Study Director, on 202/334-2550. We look forward to hearing from you.

George T. Duncan, Chair  
Panel on Confidentiality and Data Access

Presented at the IASSIST 90 Conference held in Poughkeepsie, N.Y. May 30 - June 2, 1990.



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